

## REMARKS/ARGUMENTS

The applicants acknowledge, with thanks, the Office Action dated January 7, 2011. Claims 1, 11, 21, and 31 have been amended herein. No claims were canceled and claims 45-50 are newly added. Accordingly, claims 1, 8-11, 18-21, 28-31, and 39-50 are currently pending.

No new matter has been introduced into the application by the amendments above. In particular, the outbound scan integrity check means being adapted for second capturing item identification information for each item of the pooled group of items for determining a mis-sorted item amongst the pooled group of items comprising the first and second sets of items by a comparison between the second captured item identification information and the associated information created by the capturing mode specifying means is disclosed in the specification as published such as at paragraphs [0133]-[0135] for example. In addition, the delivery scan means configured to receive the specified consolidation and routing data as preload delivery data and third user input corresponding to a user-selected unique group of items of the pooled group of items for delivery to a specific destination of the associated selected destinations, the delivery scan means being adapted to receive third captured item identification information for each delivered item of the pooled group of items for determining a correspondence between the preload delivery data, the third user input, and the third captured item identification information as a one of a delivered item, a mis-delivered item, an un-delivered item, or an over-delivered item is disclosed in the specification as published such as at paragraphs [0147]-[0155] for example.

Reconsideration of the instant application as amended is respectfully requested.

## The Art Matters

Claims 1, 8-11, 18-21, 28-31, and 39-44 were rejected in the Office Action of January 7, 2011 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2004/0153379 to Joyce (*hereinafter*, "Joyce"), in view of U.S. Patent Publication No. 2002/0010661 to Waddington (*hereinafter*, "Waddington"). In view of the amendments and arguments set forth below, it is submitted that all pending claims are patentably distinct over the art of record.

The independent claims of the present application are directed to novel and unobvious electronic systems, methods, computer readable medium, and computer implemented methods for managing items in a supply chain and, in particular, in a pooled distribution system. Claim 1 for example recites an electronic system for managing items in an associated pool distribution supply chain for pooled distribution of the items to one or more destinations. The system comprises item information capturing means, capturing mode specifying means, outbound scan integrity check means, delivery scanning means, communicating means, means adapted for commencing distribution, and means for generating report data. The item information capturing means is adapted for first capturing item identification information associated with a plurality of received items associated with a plurality of unique shipper sources and delivery destinations, each of the plurality of items being identified for supply chain management in connection with an associated pooled transport distribution system. The capturing mode specifying means is adapted for receiving first user input corresponding to each of the plurality of shipper sources, each received first user input being representative of a selection of at least one of a plurality of capturing modes, wherein each capturing mode is adapted for creating associated information by associating the captured item identification information with pool distribution supply chain information in accordance with one of the plurality of shipper sources corresponding thereto. The outbound scan integrity check means is adapted for receiving second user input corresponding to a user-selected sorted consolidation of groups of the plurality of items associated with the plurality of unique shipper sources prior to delivery by grouping a first set of items associated with a first shipper of the associated pool transport distribution system together with a second set of items associated with a second shipper of the associated pooled transport distribution system as a pooled group of items in accordance with the pool distribution supply chain information, and relative to routing of transport of the pooled group of items associated with the first and second shippers by a single associated pool distributor of the associated pooled transport distribution system to an associated destination store of the one or more destination stores. In addition, the outbound scan integrity check means is adapted for second capturing item identification information for each item of the pooled group of items for determining a mis-sorted item amongst the pooled group of items comprising the first and second sets of items by a comparison between the second captured item identification information and the data associated with the destination store. The delivery scan means is configured to receive the specified

consolidation and routing data as preload delivery data and third user input corresponding to a user-selected unique group of items of the pooled group of items for delivery to a specific destination of the associated selected destinations, the delivery scan means being adapted to receive third captured item identification information for each delivered item of the pooled group of items for determining a correspondence between the preload delivery data, the third user input, and the third captured item identification information as a one of a delivered item, a mis-delivered item, an un-delivered item, or an over-delivered item. The communicating means is adapted for communicating the associated information and the captured item identification information to an associated data storage device for storage in accordance with one of the plurality of sources corresponding thereto. The distribution commencing means is adapted for commencing distribution by the single associated pool distributor of each item of the first and second sets of items of the pooled group to the one or more associated destination stores in accordance with the sorted consolidation and routing specified by the first user input. Further, the reporting means is configured for integrity report data representative of confirmation of a delivery and selectively an overage and a shortage by the single pool distributor.

Applicants respectfully submit that neither Joyce, nor Waddington, nor their combination teaches, suggests or fairly discloses the features set out in the amended claims herein. In particular, Joyce fails to disclose, in an electronic system for managing items in a supply chain, an outbound scan integrity check for determining a mis-sorted individual item amongst a pooled group of items or orders comprising first and second sets of items by a comparison between item identification information captured of the pooled group of items against associated information created by a capturing mode specifying means receiving the items from a plurality of associated unique shipper. In addition, Joyce fails to disclose, in an electronic system for managing items in a supply chain, the delivery scan means configured to receive the preload data and adapted for third capturing item identification information for a user-selected unique group of items associated for delivery to a specific destination by comparison between the item identification information preloaded into the scanning device for a specific destination and the third captured item identification information acquired by a scanning of each item at delivery. Joyce also does not disclose any item level reporting resulting from the outbound integrity check or preloaded delivery scanning which are useful to ensure that particular identified items are indeed delivered to their intended destinations.

Joyce discloses in Fig. 1 thereof ordered items 102 which are sorted into sub-packages 120 (essentially "orders"). One or more orders 120 are gathered into a sub-package 122 which is in turn loaded onto a delivery truck for delivery to one or more authorized outlets 126. In Joyce, only the orders 120 are tracked and the integrity thereof monitored relative to the sub-package 122. Thus, in contradistinction to the example embodiments of the claimed invention, Joyce fails to disclose an outbound integrity check for determining mis-sorted items amongst the pooled group of items comprising the first and second sets of items by a comparison between second captured item identification information and associated information created by a capturing mode specifying means receiving the items into the system. Further, Joyce fails to disclose any type of item level integrity check when the orders 120 are delivered to the authorized outlet 126. Indeed, there is no mention in Joyce of any scanning of the individual items at delivery.

Overall, therefore, it is respectfully submitted that, to the extent there is any integrity checking in the consolidation or delivery process in Joyce it is only between the order number (aka the "sub-package") and the consolidated packages, but not between the individual items and the sub-package 122. In general in Joyce, items 102 are part of orders. Each order has a packing slip 600 associated therewith. The packing slip lists all items that form the sub-package ("orders") 120. The packing slip lists each item 102/602 that is in the order/sub-package, the sub-package identifier (an "order number") 606 and the tracking number 610. See paragraphs 49, 50, 63. A consolidated carton could also have a "control device" included in it which is a list of all the orders/sub-packages within the consolidated package as shown at 115 in Fig. 4 for example.

In Joyce there is no integrity to the process to ensure that the correct items 102 are put into the consolidated package 122 or that the specific items scanned at the distribution center are in fact being delivered to the one or more intended destinations. This feature is set out in the amended claims herein and described in the specification of this application such as at paragraphs [0135] and [0138]-[0143] for example and shown in Figures 21 and 23-30 for example. The system of Joyce does not direct or alert the person packing the consolidated package that they have loaded all the items into the consolidated package or the correct ones into the consolidated package. The only mention in Joyce of any integrity to the process is the scanning of the tracking number and the sub-package identifier 52, 53, 64. Consequently, an

operator would know that the sub-package identifier and its embedded attributes (sub-package number, customer address, etc.) match those of the tracking number on the consolidated box. The Joyce system does not, however, ensure that the correct items or number of items are correctly located or placed in the consolidated box. With the system of Joyce, it is possible to ship an empty box, so long as the order identifier and tracking number match.

Additionally, the system of Joyce does not direct or alert the person delivering the pooled group of items that the correct items are being delivered. There is no mention in Joyce of any item level confirmation at delivery by means of comparing item identification information preloaded into the scanning device for a specific destination against the scan of individual items at delivery. This feature is set out in the amended claims herein and described in the specification of this application as such at paragraphs [0136] and [0144]-[0152] for example and shown in Figures 22, 33, 35, 36, and 43 for example.

On the other hand, as described in the present application such as at paragraphs [0133]-[0135] for example and with reference to Figs. 20 and 21, in the pool distribution model, handheld scanners are used to collect data at various points in the supply chain including (i) inbound, (ii) outbound scan/integrity check, (iii) delivery, and (iv) pickup. The inbound scanning process is shown in FIG. 20. Inbound scanning occurs upon the arrival of a truck from a shipper's distribution center at a pool distribution site. Here the pool distributor selects inbound scanning mode on the scanner 2002, enters information on the inbound load such as the trailer number, seal number, etc. 2004, scans the freight off of the tractor trailer 2006, and, when finished scanning all of the cartons on the trailer, uploads the data captured by the scanner to the desktop application 2008. The outbound scan/integrity check process is shown in FIG. 21. Outbound scanning/integrity check scanning occurs after the initial receipt of the shipper's freight and the inbound scan. Once the freight that has been received is sorted and segregated by store order, the outbound scan/integrity check mode 2102 is selected, the store number of the order to be checked is entered into the scanner 2104, and the cartons scanned 2106. If in the process of scanning, a carton has been mis-sorted, the scanner will emit an audible tone and the scanner will turn off. This alerts the user to an incorrect sortation. This scan also helps the pool distributor to catch any cartons that were not scanned inbound. After completing this scan, the data in the scanner is uploaded into the desktop application 2108.

Applicants respectfully submit that Joyce fails to disclose these features in a pool distribution system or environment and which are essentially contained in the amended independent claims herein.

Waddington fails to cure the deficiencies of Joyce. In Waddington, items are “pulled” from inventory at a distribution center and placed into a box or other container for distribution to selected locations. As shown in Fig. 2 of Waddington and described for example at paragraphs [0079]-[0082], the distribution center 12 generally performs the steps illustrated in FIG. 2 to service or otherwise fulfill orders from the retail stores 16 or other entity. After the order has been received, warehouse staff gather the ordered items into containers destined for the retail store at step 22. To assist the staff with filling the container, the wrist-mounted computer then instructs the staff to go to a certain location in the warehouse and scan the barcode associated with that location. If the correct location barcode has been scanned, the wrist-mounted computer describes the item stored at that location and quantity of the items required to be pulled from the identified location by the order on its display. In Waddington, the location of the one or more items and the quantity of items to be retrieved from that location are specified, rather than a specific item itself. In other words the system of Waddington tells the operator to pick a quantity of items but not which specific items. In Waddington the items themselves are not tracked.

Accordingly, Waddington simply describes, on the order receiving and pre-staging side of the distribution system, pick and place technology and falls short of disclosing determining a mis-sorted individual item amongst a pooled group of items or orders comprising first and second sets of items by a comparison between item identification information captured of the pooled group of items against associated information created by a capturing mode specifying means receiving the items from a plurality of associated unique shipper and, further, Waddington fails to disclose these features in a pool distribution system or environment and which are essentially contained in the amended independent claims herein. Yet still further, Waddington fails to disclose any system to ensure that the correct items are being delivered. There is no mention in Waddington of any item level confirmation at delivery by means of comparing item identification information preloaded into the scanning device for a specific destination against the scan of individual items at delivery.

For at least the above reasons, it is respectfully submitted that each of independent claims 1, 11, 21, and 31 are novel, patentably distinct and unobvious over the art of record. Claims 8-

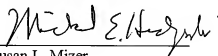
10, 41, and 45-50 depend from amended claim 1. Claims 18-20 and 42 depend from amended claim 11. Claims 28-30, and 43 depend from amended claim 21. Claims 39, 40, and 44 depend from amended claim 31.

### **Conclusion**

In accordance with the afore-noted amendments and comments, it is submitted that all claims are patentably distinct over the art, and in condition for allowance thereover. An early allowance of all claims is respectfully requested.

If there are any fees necessitated by the foregoing communication, the Commissioner is hereby authorized to charge such fees to our Deposit Account No. 50-0902, referencing our Docket No. 078297/000001.

Respectfully submitted,



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